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- comprises one or more implantation shanks that will form one or more implantation sites on the tissue when implanted into the tissue;
- e. positioning the device in proximity of an implantation vicinity; 5
 - f. capturing a raw image of a field of view of the implantation vicinity, wherein an initial implantation location is contained within the field of view;
 - g. identifying the initial implantation location within the raw image of the field of view; 10
 - h. analyzing the raw image to delineate tissue structures subject to damage by the one or more implantation shanks of the device during implantation;
 - i. virtually reorienting the device to one or more subsequent implantation locations and analyzing tissue structures subject to damage by the one or more implantation shanks of the device at the one or more subsequent implantation locations; 15
 - j. identifying an optimal implantation location that leads to minimum tissue damage; 20
 - k. adjusting the device to the optimal implantation location;
 - l. actuating the device to be implanted along a single, longitudinal axis toward the optimal insertion location through a distance that is determined based on the desired depth of the device in the tissue and the instantaneous distance between the actuator and a surface of the tissue; 25
 - m. releasing the device that was implanted in the tissue by retracting the clamping surfaces from the device; and 30
 - n. retracting the actuator.

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